

## The Use of Fire in Australian Homicide Cases: A Link to MTTAF and the Action Systems Framework

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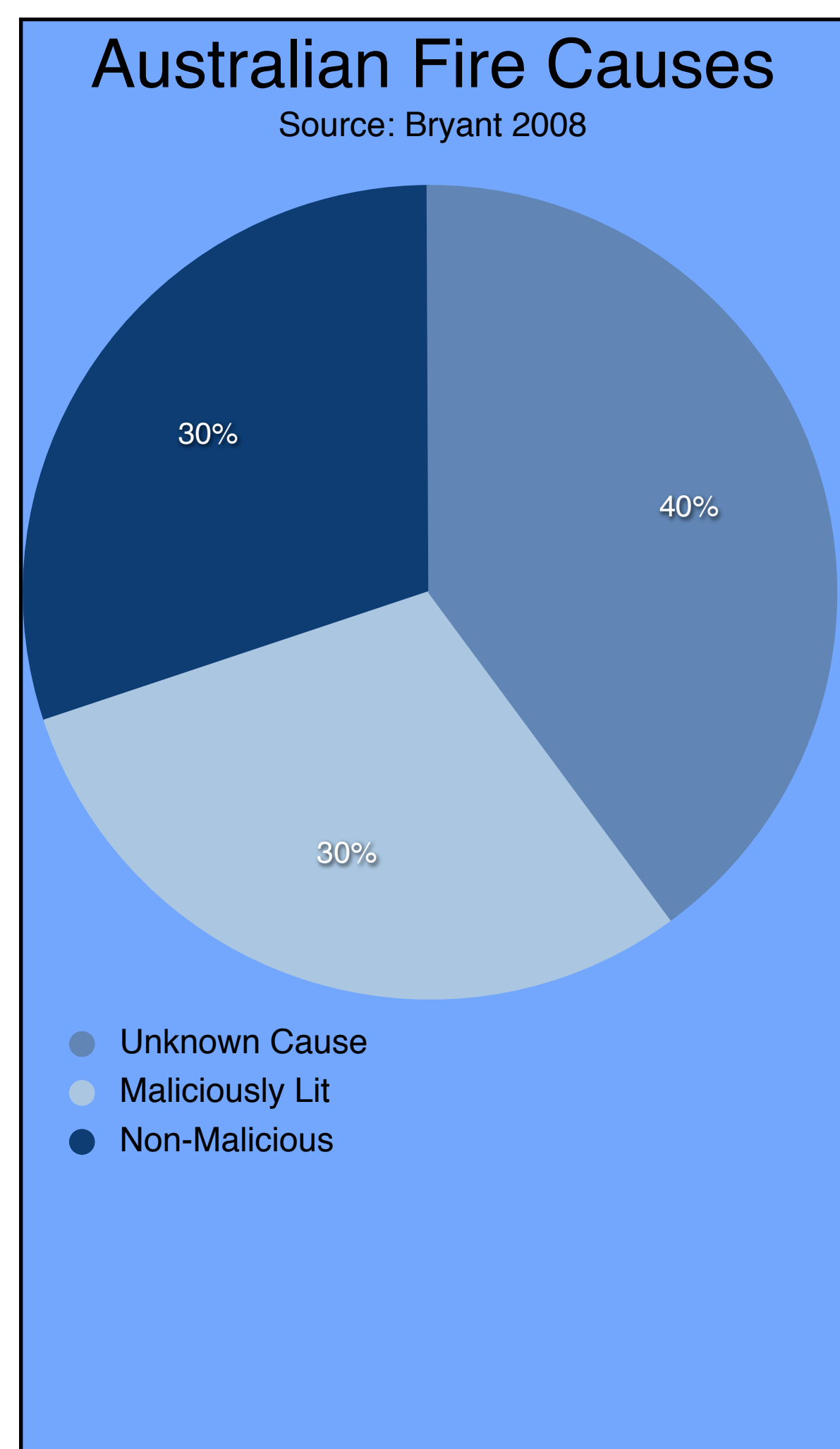


## Abstract:

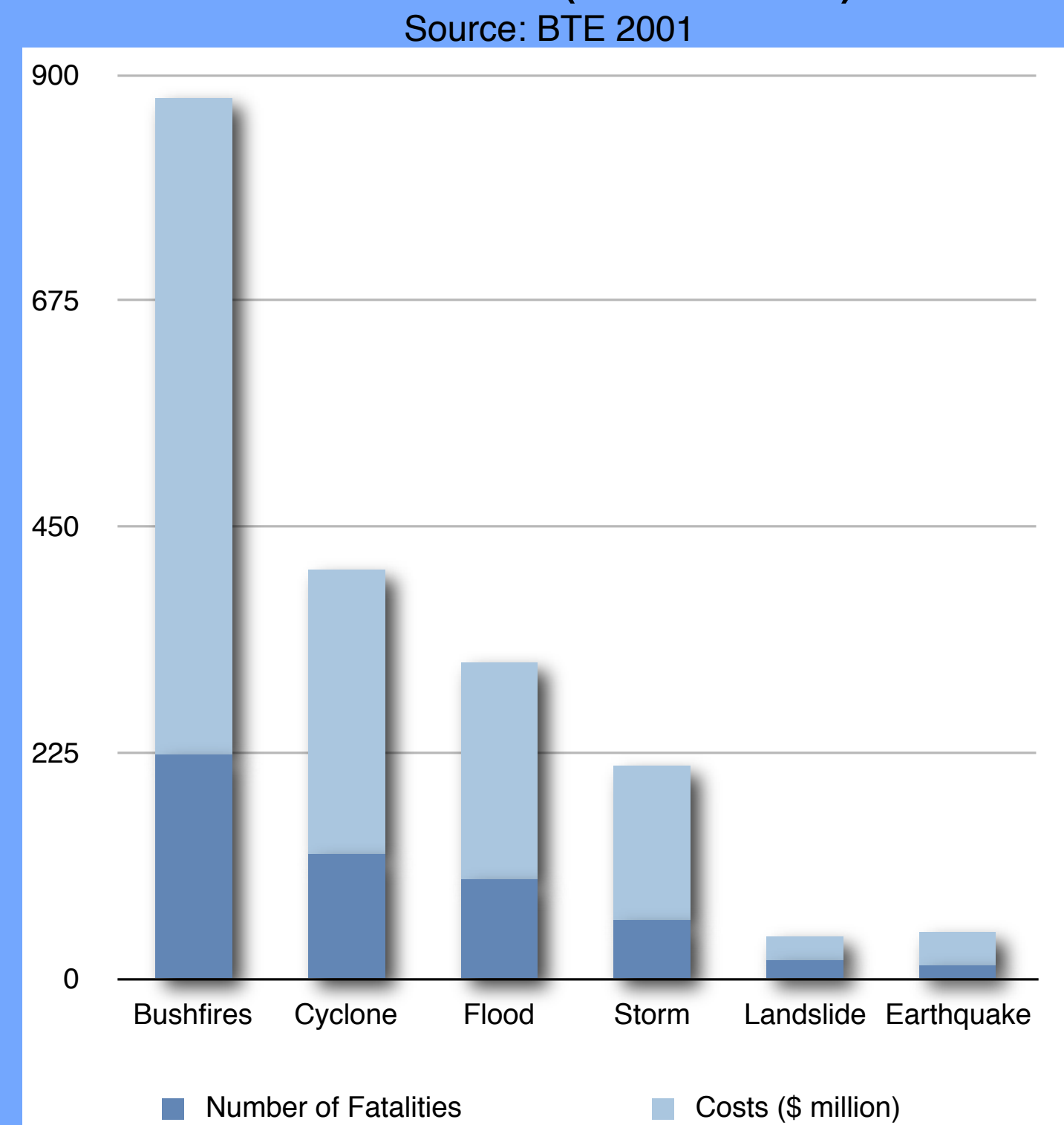
This project will examine the use of arson in homicide cases in Australia since 1990. It will involve a partnership between ACART and the Australian Institute of Criminology's National Homicide Monitoring Program in order to examine the link between crime scene indicators, firesetter characteristics and the Multi-Trajectory Theory of Adult Firesetting treatment program. The project has relevance to treatment providers, investigators and researchers by linking all three in a comprehensive assessment of arson associated fires and the offenders who perpetrate them. Multidimensional statistical analysis will be used to identify themes and logistic regression will be employed to identify relevant predictor variables. Results will be of benefit to investigators and mental health professionals, as well as informing prevention efforts.

## Introduction:

- An expansion of ACART's work examining associations between firesetting and homicide.
- Area has received scant attention in the published empirical literature despite data that it causes 100 deaths per annum in England and Wales and 500 in the USA (Arson Prevention Bureau, 2003; Prestemon and Butry 2005). The findings will be set to the current best practice model explaining deliberate firesetting (M-TTAF).
- Despite arson incidents having grown by almost 2000% in the last 30 years, very little study of arsonists
- A major challenge is a lack of consistency in recording, monitoring or treating deliberate fire-setters in different states and territories. The result has been a call to action to improve arson prevention (Stanley & Kestin, 2010).
- Bushfire CRC research analysing more than 280,000 fires in Australia (Bryant 2008) found 60 percent of fires have a known cause and around half are maliciously lit.
- Arson costs the Australian community \$1.6 Billion annually (Muller, 2009), although exact figures are difficult to determine.
- The aims of this project are original in that they seek to inform both investigations as well as treatment.



## Costs of Bushfires and other Natural Disasters (1967-99)



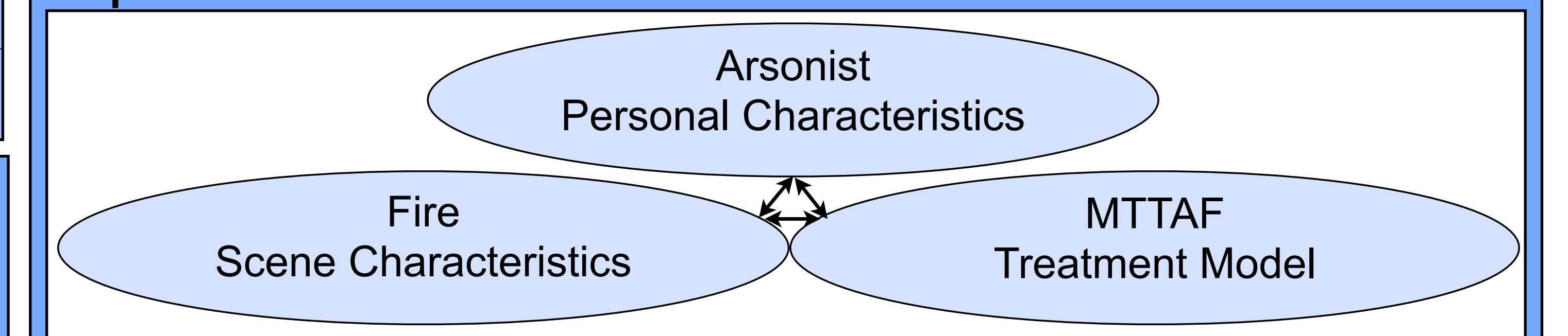
## Research Questions:

- How often was firesetting used in homicides?
- Why was the firesetting carried out (M-TTAF/Action Systems Model)?
- Do arson-homicides with various motives involve different elements of firesetting and present differently?
- Do arson-homicides with various motives involve different offenders with different characteristics and treatment needs?
- How is this crime type reflected in the M-TTAF model of deliberate firesetting?

## Approach/Methods:

- Variables will be extrapolated from the empirical literature explaining deliberate firesetting.
- Issues specific to homicide offenders will be considered and a proposed model of arson-related homicide will be developed and tested.
- Theoretical underpinnings of the classification system will be used to discriminate types of arson (validated in: Canter & Fritzon, 1998; Fritzon, Canter & Wilton, 2001; Fritzon & Brun, 2005; Miller & Fritzon, 2007; Santilla, Hakkanen & Fritzon, 2003; Fritzon, Lewis & Doley, 2011).
- The findings will be set in the context of the current multi-variate model of deliberate firesetting, M-TTAF (Gannon, O'Ciardha, & Doley, 2012).
- The M-TTAF model comprises two tiers: Tier 1, seeks to integrate current theory and research knowledge into a broad theory of firesetting; and Tier 2, seeks to summarize discrete offender profiles, describing ways in which firesetters may arrive at firesetting.
- Multidimensional statistical analysis will be used to identify themes and logistic regression will be employed to identify relevant predictor variables.

## Expected Outcomes:



- Will link analyses of scene behaviours to offender characteristics, to the treatment model.
- Will facilitate further testing of Fritzon and Canter's (1998) action systems model to determine its applicability to homicides.
- Findings will inform ACART treatment manual
- May also be helpful to fire investigators and law enforcement personnel.
- Findings will facilitate the ability to carry out detailed assessments of the types of firesetters who eventually set fires involving a loss of life so that these risk factors for escalation may be widely known and these types of fires better investigated and prevented.



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